COVOX

COVOX DEVELOPER'S KIT

Audio Software Programmer's Package for IBM PC/Compatible Computers

The Covox Developer's Toolkit provides C programmers with the ability to incorporate sound and music into education, database, entertainment, and presentation software applications. The addition of audio effects to your applications can provide attractive, *professional* results. No need to spend hours of work with low-level programming...the Toolkit contains all of the tools necessary to easily and conveniently program with MIDI, digitized sound, and FM music generation. The features of the Developer's Toolkit include:

- Microsoft and Borland C object libraries for digitized recording and playback, FM synthesis and MIDI support. Small, medium, compact and large models supported.
- Comprehensive example source code with make files.
- Full support of both DMA and non-DMA digitized I/O.
- 8 bit PCM and 2/3/4 bit ADPCM compression formats.
- Conversion program for converting between digitized sound formats.
- FoxPro and dBase loadable sound driver modules.
- Clipper support.
- Utility programs for recording, playing, and graphically editing digitized sound.
- TSRPLAY program allows continuous playback of digitized sound while running other applications!
- C callable hooks to TSRPLAY for customizing TSR playback into your application.
- Detailed documentation on low-level programming of Covox hardware.
- Diagrams of Covox hardware and documented hardware specs.
- 218-page manual with software pocket. Linen binder/sleeve enclosures.

The Covox Developer's Toolkit supports the entire Covox family of products. A Voice Master or Sound Master II is required for recording digitized sound; digitized playback requires a Voice Master, Sound Master II, or Speech Thing. MIDI I/O is supported by both Sound Master II and MIDI Maestro; FM music synthesis is supported by the Sound Master II only. No run-time royalties are required. Software on 3½" 720K floppies unless otherwise specified.

COVOX DEVELOPER'S TOOLKIT Model DVPR-P0-100 $99.95 (5.00)

SYSTEM REQUIREMENTS: 286 IBM/compatible or faster machine, 640K RAM, and MSDOS 3.1 or higher. Hard drive highly recommended.

COVOX INC.
675 Conger Street
Eugene, Oregon 97402 U.S.A.

Tel: (503) 342-1271
Fax: (503) 342-1283
BBS: (503) 342-4135

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S O U N D M A S T E R® II

SPEECH • VOICE RECOGNITION • MUSIC • MIDI

- **VOICE RECOGNITION software. Translates voice commands into keystrokes and macros.**
- **100% AdLib™ compatible. 11 Voice FM Music Synthesizer.**
- **Exclusive SMULATOR™ technology[1]. Allows software requiring other sound cards to be compatible with Sound Master II -- *WITH BETTER SOUND QUALITY!***
- **Covox Voice Master®, Speech Thing®, MIDI Maestro™ compatible.**
- **8 bit DMA sound digitizer. Sample rates to 25Kbytes/sec. Record and playback sound directly to and from RAM or hard disk. Multiple levels of compression are supported.**
- **MIDI interface with simultaneous input and output. MPU-401 compatible. PC-LYRA™ graphics based music composition software included.**
- **4-watts (peak) audio amplifier with adjustable volume control.**
- **Dual 3-inch speakers with 3-foot (1 meter) cable included.**
- **Internal PC speaker supported[2]. Improves sound from any software using the PC's internal speaker.**
- **Audiophile sound quality. Low noise, precision engineered electronics.**
- **Extensive software tools and support, including the industry's best digital audio compression and editing utilities.**
- **Supported by the largest library of software titles in entertainment, business, music, and education.**
- **One year limited warranty.**
- **Made in USA by Covox -- THE microcomputer audio specialist since 1975.**

Your Best Choice for Multi-Media PC AUDIO

SOUND MASTER II SMMM-PO-107 $229.95

Hardware: Sound Master II sound card, twin mini-speakers, 6-foot (2 Meter) MIDI cable, internal PC sound adapter, mono-to-stereo headphone/speaker adapter.
Software: Sound recording and playback, audio special effects, Voice Master Key voice recognition program, sound waveform editor, PC-Lyra music editor, multimedia player, SMULATOR™ utility, programming libraries, and user manual. (Not copy protected.)
System requirements: IBM XT/AT/286/386/486 or compatible, 256K RAM, DOS 3.0 or hIgher, and a spare 8- or 16-bit slot for the card. Software on 5.25 floppies unless otherwise specified.

1. SMULATOR™ program emulates Sound Blaster 8-bit digitizer and Roland MPU-401 UART MIDI hardware. A 80386 SX or higher processor is required .

2. To utilize the internal speaker feature, your PC must have a chassis-mounted speaker.

COVOX INC.
675 Conger Street
Eugene, Oregon 97402 U.S.A.

TEL: 503-342-1271 • FAX: 503-342-1283 • BBS: 503-342-4135

YOUR DEALER IS:

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PC-Voice/*ST*™

. . . A new freedom of expression from Compeer

Enables your Covox Speech Thing® to speak fluently without programming.

Generate speech by -

- Typing anything you'd like to speak, *or*
- Selecting, chaining, or augmenting pre-entered phrases or words from large easily accessed libraries, *or*
- Accessing "scratchpads" to rapidly speak whole paragraphs, *or*
- Having the text reader speak all or portions of any file.

Experience the fun, utility, and educational value of computer speech by -

- Exploring the use of phonetics in speech.
- Experimenting with our built-in alternate keyboards.
- Reviewing your writing with the text reader.
- Customizing your own library of phrases, words, and lists.

Help a non-speaking friend to communicate -

- At rates approaching conversational speed.
- With quick access via keyboard, mouse, or any similar pointing device (a scanning option is available).
- Using word prediction to speed typing.
- With a program that is easy for anyone to learn.

Special Offer – For Speech Thing® Users Only

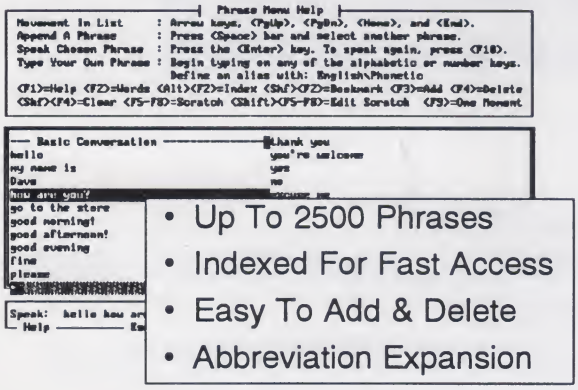
For a limited time, obtain the extensive computer speech generation capabilities of a ***$400 software package for only $99.*** Don't Delay – Fill in the attached coupon on the back of this flyer!

Compeer, Inc., 1409 Graywood Dr., San Jose, CA 95129

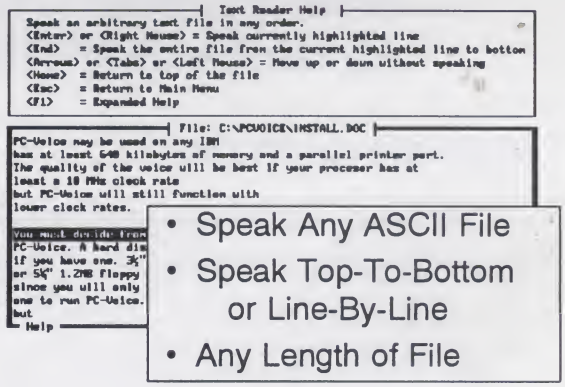
Additional features which make PC-Voice software easy to use include verbal prompting by the program, selection of voice attributes, and full control of the color and appearance of the display screen. Brief help screens can be displayed, as well as a word prediction box, which pops up as you type.

Examples of speech generation menus are shown below.

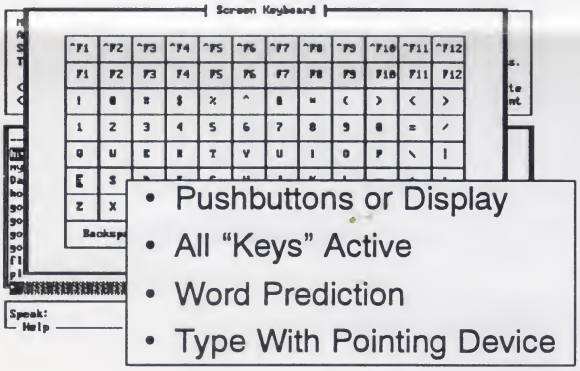
Phrase Menu



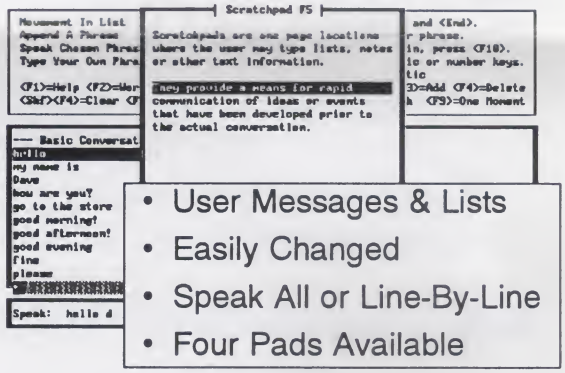
Text Reader



Virtual Keyboard



ScratchPads



To place an order, use the coupon below:

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COVOX DEVELOPER'S TOOLKIT

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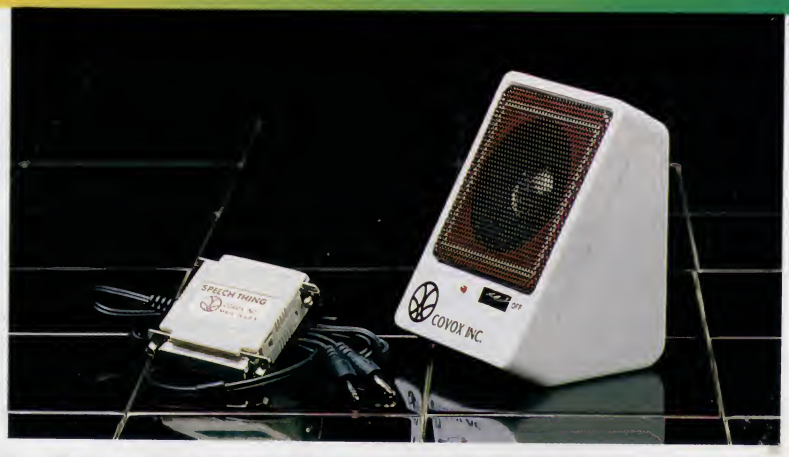
SPEECH THING®

THE PC STANDARD FOR HIGH FIDELITY SOUND OUTPUT

U.S. PATENT NO. 4,812,847



Now add clear and clean digitized sound and speech to any MSDOS computer with a printer port. The Speech Thing is a full featured 8-bit digital-to-analog converter with audio amplifier and software that is capable of reproducing almost any sound imaginable!

You don't have to open up your computer case to connect the Speech Thing because it attaches in-line with the parallel printer port outside the computer and does not interfere with normal printer operation. A printer need not be connected.

The audio amplifier has a full range speaker with volume control and LED indicator light. It is powered by an internal 9 volt battery or an optional AC adapter. An external earphone jack is provided for private listening.

COVOX SOFTWARE

The Speech Thing is used to convert digitized or synthesized sound from software sound files that are included. Speech Thing is also supported by a wide variety of consumer, educational, and business software titles.

Covox software includes several demonstration programs that contain pre-recorded sounds. A special Covox utility program operates a different digitized sound format ("CVSDM") such as found with IBM-brand talking educational software programs. A talking example is included.

A sound editing program shows sound waveforms in graphic detail. You can load in any of the Covox sound files and edit them like a word processor edits words. Sound files from other software programs can be imported and edited too! (limited to 8-bit uncompressed format). You may cut and paste, raise or lower sound levels, high pass or low pass filter, invert, duplicate, etc. Results can be saved to disk and linked to form digital sound files for your own programs. Data compression utility can compress the sound file by removing silence periods, sections of sound, or compressing eight bit samples to four or one bit samples. A second playback utility is also included for non-graphics sound manipulation and compression.

TEXT-TO-SPEECH SOFTWARE

SmoothTalker text-to-speech is natural synthesized speech. Previously possible on large mainframe computers, SmoothTalker is implemented entirely in software, a breakthrough in speech synthesis technology. SmoothTalker accepts plain English ASCII text from either the keyboard or from a text file and automatically synthesizes the text into a clear and smooth sounding male voice. Keyboard driven commands allow you to quickly specify the speed, pitch, and tone of the voice. SmoothTalker is capable of correctly pronouncing approximately 95% of English-based words, as well as commonly used abbreviations and numbers. A dictionary feature lets you teach your computer to pronounce exceptions as you would like to hear them spoken.

SmoothTalker can be used in a variety of applications: Proof read letters, memos, and reports created from most word processors or text editors; verify data and numbers from spread sheets (loaded as text documents); use for learning reading skills and foreign language training; create programs that use SmoothTalker in education, games, presentations, or spoken advisories (weather reports, home automation, etc.)

PROGRAMMING TOOLS

The Speech Thing DOS device driver allows playback of SmoothTalker text-to-speech from most programming languages and application programs. DOS prompt screen echo also supported. Program examples and instructions included with product. Digitized sound playback is supported by resident software drivers and libraries which support applications written in C, BASIC, assembly, and other languages. Software developers are encouraged to write software that utilize the speech and sound playback capabilities of the Speech Thing. Some restrictions apply for SmoothTalker. Contact Covox for further details on licensing.

SPEECH THING Model STPC-PO-273 $79.95 (5.00)

Optional 9 volt AC adapter for Speech Thing (110 volt primary voltage only) Model STAD-PO-000 $5.00 (2.00)

SYSTEM REQUIREMENTS

256K of RAM, MSDOS 2.11 or higher, and GWBASIC (for operating program demonstrations)

Speech Thing comes complete with audio amplifier speaker, software, and manual. Software format on 5 1/4" floppies unless otherwise specified.

COVOX INC.
675 Conger Street
Eugene, Oregon 97402 U.S.A.

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Partial List Of Supporting Software Titles For The Covox Speech Thing®

December, 1991

The following (known) software companies produce titles which support the Speech Thing with either digitized sound files, or drive the text-to-speech software included with the product. (NOTE: If you own a bus version Voice Master or Sound Master product, you can operate the sound through either model with the THING.EXE utility.

- AEC Software -"Reading Skills Development Program". 7506 N. Broadway Ext., Suite 505, Oklahoma City, OK 73116 Tel: 405-848-3960, FAX 405-848-3960.
- Animated Voice Corp. -All educational titles, plus sound developer libraries P.O. Box 819, San Marcos, CA 92069 Tel: 619-744-8190
- Audio Solution (The) -Supplier of sound drivers for software developers. P.O. Box 11688, Clayton, MO 63105. Tel: 314-567-0267.
- Brightbill-Roberts -"Showpartner F/X" (Presentation programs) 120 E. Washington St., Syracuse, NY 13202 Tel: 315-474-3400, FAX 315-472-1732.
- Brittanica Software -"Compton's Multimedia Encyclopedia" 345 Fourth St., San Francisco, CA 94107 Tel: 415-597-5555, FAX 415-546-1887.
- Computer Easy -"Ante Up", "Friday Night Poker Club", "Pic Trivia" REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE 414 East Southern Ave., Tempe, AZ 85282 Tel: 602-829-9614, FAX 602-829-9616
- Davidson Software -"Reading and Me", "Spell it Plus", "Word Attack Plus". 19840 Pioneer Ave., Torrance, CA 90503 Tel: 310-793-0610, FAX 310-793-0611.
- D&G Infosystems -"Let's Have Fun With ABC's", "Kid Scholar". 148 Patterson Ave., Hempsted, NY 11550 Tel: 516-538-1240
- Datalision -"SideVoice" (Sound files for Multimedia software). 4 Blvd. St. Lazare #B, 1210 Brussels, Belgium Tel: 32-2-219-4629, FAX 32-2-217-9201.
- Dolphin Systems -"Picom" (for sight impaired) REQUIRES SPEECH THING'S TEXT TO SPEECH SOFTWARE. P.O. Box 83, Worcester WR1 2RN England Tel: 44-905-723654, FAX 44-905-723656
- Electronic Arts -"688 Attack Sub", "Chuck Yeager's Combat". 1820 Gateway Dr., San Mateo, CA 94494 Tel: 415-571-7171, FAX 415-571-7995.
- Exceller Software -"A-Lab" (authoring tools for language training). Cornell Industry & Tech Park, 223 Langmuir Lab, Ithaca, NY 14850 Tel: 607-257-5634, FAX 607-257-1665.
- First Byte -"Monologue 2.0" (text reading program), plus all early learning educational titles. 19840 Pioneer Ave., Torrance, CA 90503. Tel: 310-793-0610, FAX: 310-793-0611.
- Hannes Keller Witch Systems -"Witchpen" (language translating software that speaks). REQUIRES SPEECH THING'S TEXT TO SPEECH SOFTWARE. Binzmuhlestr. 45, 8050 Zurich, Switzerland Tel: 41-1-311-6595, FAX 41-1-311-6540.
- Hearsay -"Hearsay 500" (text-to-speech programs). 307 76th Street, Brooklyn, NY 11209 Tel: 718-836-0990, FAX 718-836-1159.
- HEC Software -CDROM adult literacy software programs. 3471 South 550 West, Bountiful, UT 84010 Tel: 801-295-7054
- HFK Software -"Qwerty Word Processor" (for sight impaired) REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 68 Wells Rd., Lincoln, MA 01773 Tel: 617-259-0059
- HyperGlot Software -several foreign language training software packages. 505 Forest Hills Blvd., Knoxville, TN 37919 Tel: 615-588-6569, FAX 615-588-6569.
- IBM Educational Software -"Writing to Read", and other talking titles. REQUIRES A PC WITH 10 MHZ OR FASTER PROCESSOR. Multimedia Assistance Center, 4111 Northside Pkwy, Atlanta, GA 30327. Tel: 800-627-0920.
- Information Processing Consultants -"CL-100" Chinese language training programs (includes chinese character print program). 2395 Anamanda Close, Norcross, GA 30071. Tel & FAX: 404-447-5129.
- International Software -"Learn Spanish", "Learn German" language translating software that speaks. REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. P.O. Box 747, Running Springs, CA 92383. Tel: 714-867-2436.
- Laureate Learning Systems Inc. -Several special educational talking titles. 110 East Spring St., Winooskik, VT 05404. Tel: 802-655-4755, FAX 802-655-4757.
- Lawrence Productions -"Katie's Farm", "McGee" (talking childrens software). 1800 South 35th, Galesburg, MI 49053 Tel: 616-665-7075, FAX 616-665-7060.
- McGraw Hill Continuing Education Center -computer learning courses. 4401 Connecticut Ave. NW, Washington, DC 20008 Tel: 202-244-9807, FAX 202-244-9799.
- Microsystems Software -"HandiChap" series (for sight impaired) REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 600 Worcester Rd., Framingham, MA 01701 Tel: 508-626-8511
- Milliken Software -"Milliken Story Teller" and other talking childrens titles. 1100 Research Blvd., St. Louis, MO 63132 Tel: 314-991-4224, FAX 314-991-4807.
- Millennium Corp. -"Open System" interactive software production system. 4210 Shawnee Mission Pkwy #177, Mission, KS 66205. Tel: 913-362-5305, FAX 913-362-9406.
- M.P. Technologies Inc. -Developer of multimedia tools, applications, and integrated software for DOS and Windows. 4801 Fairmont Ave., Bethesda, MD 20814. Tel: 301-907-0042, FAX 301-907-0119.
- MusicWare -"PCLYRA" music composing software. Hamlet Rt., Box 1261, Seaside, OR 97138 Tel: 503-738-0119
- Nanopac -"Cintex" handicap software for paraplegics REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 6919 So. 76th East Ave., Tulsa, OK 74133 Tel: 918-665-0329, FAX 918-583-9901.
- Optimum Resource/Weekly Reader Software -"Sticky Bear" childrens software. 10 Station Place, Norfolk, CT 06058 Tel: 203-542-5553, FAX 203-542-5685.
- Orange Cherry/Talking Software -talking childrens software. P.O. Box 390, Pound Ridge, NY 10576 Tel: 914-764-4104, FAX 914-764-0104.
- PC Pals -"Flashmaster" series educational software. 11546 South St., Cerritos, CA 90701
- Pedersen Systems Inc. -Game and sound developement tools. 119 Rockland Center 285, Nanuet, NY 10954 Tel: 914-623-2245
- Rapid Int'l Inc. -Foreign language training software, covering more than 20 languages. No. 10 & 12, Jalan Wan Kadir, Taman Tun Dr., Ismail, 6000 Kuala Lumpur, Malaysia. Tel: 60-3-718-6909, FAX 60-3-718-7229.
- Sami Tammilehto Software -"Scream Tracker", and other music and sound development software. Korikatu 8, SF-20780 Kaarina, Finland. FAX 358-21-512470.
- Signal Research Laboratory -"Screen-Speak" text-to-speech program. REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 15441 Toulouse Circle, Irvine, CA 92714 Tel: 714-857-1552
- SmartWorks -"First Letters & Words", "First Shapes", and other childrens early learning talking software. P.O. Box 369, Lomita, CA 90717. Tel: 213-326-6316.
- Softlab -"The Last Half of Darkness" game software. REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 2021 Gregory St., San Diego, CA 92104 Tel: 619-284-6237
- Software Recording Corp. -"AutoTrainer" CBT authoring software. 6060 Central #122, Dallas, TX 75206 Tel: 214-368-1196, FAX 214-750-9668.
- Speech Systems For The Blind -"Seekline Screenreader", REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 76 Wheaton Dr., Attleboro, MA 02703 Tel: 508-226-0447 (NOTE: Available on Covox BBS!)
- Teacher Support Software -"Make A Book", "Language Experience Recorder Plus". REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 1035 NW 57th St., Gainesville, FL 32605 Tel: 904-332-6404, FAX 904-332-6779.
- Thinking Software Inc. -Several artificial intelligence programs. REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 46-16 Sixty-Fifth Place, Woodside, NY 11377. Tel: 718-429-4922.
- Tri-Star Publishing -CD ROM educational software. 275 Gibraltar Rd., Horsham, PA 19044. Tel: 215-441-6470, FAX 215-441-6490.
- Turtle Beach Software -Music editing programs. Cyber Center, #33, 1600 Pennsylvania Ave., York, PA 17404 Tel: 717-843-6916, FAX 717-854-8319.
- Typequick Pty. Ltd. -"Talking Typequick" keyboard training program. REQUIRES SPEECH THING'S TEXT-TO-SPEECH SOFTWARE. 16 Cecil Street, Gordon, Sidney 2372 Australia Tel: 61-2-498-7433, FAX 61-2-499-2247.
- Villa Crespo -"Dealer's Choice" gambling software. 1725 McGovern St., Highland Park, IL 60035. Tel: 708-433-0500.
- W & K Software -Language training software. 4535 West Sahara, #105-6J, Las Vegas, NV 89102 Tel: 702-258-1250
- Wesson Int'l -"Tracon" air traffic control software (requires their own special software driver for sound). 500 S. Capitol of Texas Hwy., Bldg 5, #200, Austin, TX 78746 Tel: 512-328-0100, FAX 512-328-7838.

COVOX

VOICE MASTER®

VOICE COMMAND AND SPEECH PROCESSING SYSTEMS

VOICE MASTER KEY
BUS VERSION
ONLY $149.95

VOICE MASTER SYSTEM II
PARALLEL PORT VERSION
ONLY $219.95

INTERACTIVE VOICE RECOGNITION WITH SPEECH RESPONSE.

- A productivity enhancer - input commands by voice. **Saves time** by augmenting repetitive keystrokes or mouse shuffling.
- Reduces, *even eliminates* the need for memorizing program controls. Ideal for beginners or occasional users alike. Speeds learning efficiency associated with CAD, animation, desktop publishing, project management, inventory, inspection, security, and most other DOS applications.

IMPROVES HAND/EYE COORDINATION

- Relieves "mouse cramp" by reducing hand and wrist workload.
- Voice response feature aids user through program navigation.

AUDIO WORKSTATION

- Speech and sound recording, editing, and compression utilities. Link to voice command macros. Create talking software or memos. Great for presentations or multimedia uses.

HUNDREDS OF SUPPORTING SOFTWARE TITLES

- Voice Master is supported by talking software in areas of foreign language training, childrens reading/development skills, special needs, entertainment, and more.

SUPERIOR QUALITY. MADE IN U.S.A.

COVOX INC.
675 Conger Street
Eugene, Oregon 97402 U.S.A.

TEL: (503) 342-1271
FAX: (503) 342-1283
BBS: (503) 342-4135

SEE DETAILS INSIDE!

THE VOICE RECOGNITION SYSTEM

The all new Voice Master Key desktop utility lets you add voice commands to existing programs! Now let your voice do the work of tedious and repetitive keystrokes or extensive mouse shuffling.

A REAL PRODUCTIVITY ENHANCER

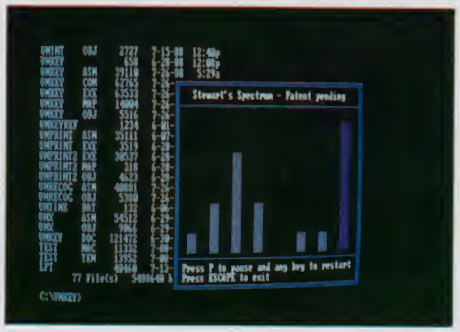
Voice Master Key turns any series of keystroke entries into macros you command by voice. Speeds up creation and editing of computer tasks. Take for example a CAD or desktop publishing system and you need to perform a function such as "zoom" or "magnify". With a mouse, the cursor is aligned to the appropriate boxes or icons, and the button is clicked. In addition, you may be required to enter extra keyboard data. (Without a mouse, it's even more trouble.) But with Voice Master Key, you simply say "zoom" or "magnify" and it's done. What a time-saver! Likewise, with a word processing program, you can use your voice to perform commands such as "italic", "underline", "bold", "block", "move", "check spelling", "print", etc. Hate to memorize all those complicated "Ctrl Alt Shift Function" commands? Let Voice Master Key remember them for you. Voice Master Key operates with most business programs including Lotus 123, AutoCad, Wordstar, WordPerfect, DBase III+, and SideKick, just to name a few. For fun, use it to command a flight simulator program or other game software. Voice Master Key adds a practical and enjoyable dimension to personal computing.

SIMPLE TO OPERATE.

Installing either model is a snap. The manual has you up and running in quickly. Operating as a TSR (Terminate and Stay Resident) program, Voice Master Key requires about 64K of memory. Apply Voice Master key with any number of software programs you commonly use. Once loaded, you will need to add voice commands. Simply press the "hot keys" (both shift keys) and the Voice Master Key Editing Menu instantly "pops up". Type in the word you want it to listen for, say it three times, then type in the desired keyboard macro response. Repeat the process for each additional word you add. Press the ESC key to "pop back" to your program. Now whenever you say the word, the response is instantly generated. It's that easy! Save your trained voice commands and macros in permanent files. One set does word processing, another does contact management -- a set for however many application programs you use. A "quick train" mode allows others to train and save their own voice templates. With pre-configured macros, anyone can operate sophisticated software in minutes!

ADVANCED CAPABILITIES

Voice Master Key was designed to be easy to operate. Yet it's programming flexibility can be adapted to more demanding applications. The program contains 16 levels each capable of storing 16 macros; a total of 256 macros. A macro can be as short as one keystroke or as long as a paragraph. Any one of the 64 voice recognition commands can be assigned to activate a macro in any one of the 16 levels, thus a single voice command can control several macros (for example, the voice command "give me a directory" requires different keystrokes between a word processor, a spreadsheet program, DOS, etc.) Macros can also call macros anywhere within the sixteen levels. You can even



branch to other 64-word and macro files modules by voice command for virtually unlimited word recognition capabilities. Macros can also include prerecorded digitized speech/sound files that are activated upon recognition prompting -- great for verbalized verification. For custom applications, the normal "pop up" interface can be disabled and all of the functions and features of Voice Master Key can be controlled from a user application written in C, BASIC, or Assembler.

There are other great features included with Voice Master Key:

- Define screen colors of the menu screens, border, and text.
- Adjust microphone threshhold and sensitivity.
- Test recognition accuracy and adjust for background noise level.
- Open a spectrum analyzer window.
- Record keyboard macros while in an application program
- Add digitized speech files to macros for verbal response.
- Select between manual or continuous voice command modes.
- Display all the words that are waiting to be recognized along the top or the side of your screen while in your normal application.
- Invoke keyboard macros without voice input.
- MORE...

A BRIEF OVERVIEW ON VOICE RECOGNITION--- & HOW IT WORKS

There are two types of voice recognition available in the market today. One is voice dictation (continuous voice recognition) and voice macroing, like that found with Voice Master.

Voice dictation gives you the ability to talk to your computer's word processor and have it understand and type out anything you say (i.e., "speech-to-text"). There are problems associated with this technology. For example, you say to the computer, "They're going to drive their new Caravan there". The computer would have to be able to differentiate between the different spellings and grammatical uses of "they're, their, and there". The computer would also have to know which word was capitalized, which one wasn't, which word was followed by a comma, etc. Now add the necessity to understand American English dialects. Even though we speak English, there exists enough accents between geographic boundaries or cultures for one to misinterpret what the other person just said! Another problem is the speed and pitch at which a person speaks. Individuals also routinely change voice inflection or speed from day to day. In reality, continuous voice recognition is limited to very small vocabularies for specific tasks. Development systems are also extremely expensive!

Covox uses voice macroing. It is like training a dog. When you say "go outside" to the dog and push him out a few times, he learns to execute the command even though he doesn't know the meaning of the words, or how to spell them. Extend this to Voice Master and your computer: "when I say this, you will do that".

Voice Master is a speaker-dependent, word-isolated voice recognition system.

Speaker dependent means that you train the computer ONLY to your voice. Theoretically, each person's voice pattern is like a fingerprint. This is why Voice Master works with either gender, any accent, or any foreign language. Voice Master can also be "trained " to understand non-voiced sounds, such as the ring of the telephone, the horn of your car, noise thresholds (decibel levels), doorbells, critical friction noise, etc. Speaker dependence offers greater reliability, vocabulary size, and flexibility for the task at hand.

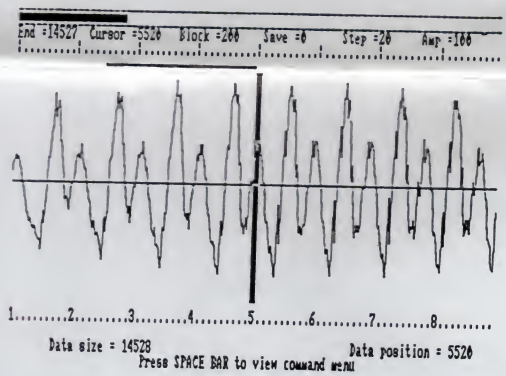
Word-isolated means that you must pause slightly between each voice command so that the computer can "capture" the word , and not noise or unwanted sounds before or after the word. What comprises a word? It can be a single utterance, multi-syllable word, or short sentence. Voice Master Key is designed to work with all three.

BRING THE POWER OF SOUND TO YOUR PC WITH VOICE MASTER'S AUDIO DEVELOPMENT SYSTEM

Voice Master also includes developer software for speech and sound recording and editing. Ideal for experimenters and software writers alike. Make sound files for spoken advisories in business and presentation software, instrumentation, language and other educational training, electronic voice store and forwarding, artificial intelligence applications, home control, etc. Sound output addressable through headset, internal Voice Master II speaker, internal PC speakers, other external speakers, etc. Sound output address ports are also 100% compatible with Covox Speech Thing and Sound Master models.

TWO TYPES OF AUDIO RECORD AND EDIT PROGRAMS

The graphics based editor program displays sound waveforms for the purpose of precise manipulations. You may cut and past, raise or lower sound levels, high pass or low pass filter, invert, duplicate, etc. Sound can be edited like a word processor edits words. Results can be saved to disk and linked to form digital sound files for use in software programs or external EPROMs. User selects sampling rate, variable between 1000 to 25,000 bytes per second. Data compression utility can compress the sound file in the buffer by removing silence periods, sections of sound, or by compressing to four, three, or one bit samples.



The other sound record/playback utility is the easier of the two to use. The RECORD and SAY executable programs provide user defined record/playback rates (to 25,000 bytes per second), format coding (8, 4, 3, and 2 bit PCM/ADPCM), and port addresses (internal, external Voice Master, or internal PC speaker). These programs are normally used for creating sound files (verbal responses) for the Voice Master Key recognition program. Another executable program, CONVERT, can be used to convert custom-made sound files from the graphics-based editor program to the SAY executable format.

SOFTWARE CONVERSION CODES

Both Voice Master versions operate a large and growing list of third party talking software titles using synthesized phonetics (text-to-speech), PCM, ADPCM, or CVSDM (IBM standard) encoded sound files. Sound files designed to operate with other audio cards can be imported (limited to standard 8-bit PCM format) and augmented to play through Voice Master. Voice Master does it all!

Covox's technology is different and proprietary. The company has invented methods of analyzing speech that uses a combination of hardware and software that is powerful, yet inexpensive. The performance of Voice Master is equal to, if not better than other speech processing / voice recognitions systems that cost hundreds of dollars more. Covox has been developing voice I/O systems since 1975. The first commercial models were introduced in 1982 for the then-popular Commodore 64. Models followed for Atari and Apple II 8-bit computers. IBM/compatible models were introduced in 1987 and are now solely supported.

VOICE MASTER KEY OR VOICE MASTER SYSTEM II...

GET THE MODEL SUITED TO YOUR NEEDS.

The Voice Master Key (bus version) model requires any 8 or 16 bit slot inside your computer. The Voice Master System II (parallel port version) attaches externally via the parallel printer port. Besides these physical differences, the operation and software are similar, but not identical. Please consider the following before making your choice:

1. The bus model has DMA (direct memory access) circuitry built in. This allows audio recording and playback of a single audio file, up to your hard disk's memory limit.. This capability also allows audio files to play while you are operating other software applications.

2. The bus model features PC internal speaker support. A chassis-mounted speaker from a conventional PC can be bypassed through the Voice Master card for enhanced audio output. A wire (with connectors) is included.

3. The parallel port model works with ANY IBM or compatible that has a printer port. This includes laptop, notebook, or others (Microchannel versions). Installation or movement to other computers is as simple as plugging in a lamp.

4. The parallel port model has separate tone and volume controls, a built-in speaker, and printer cable pass-through port. (These features may be of greater convenience for routine use.) The bus model has a volume control knob only, accessable through the metal mounting bracket.

5. The parallel port model has no conflict with I/O address, IRQ, or DMA Request/Acknowledge settings. The bus version offers several selections should the factory defaults cause a conflict.

Specifications

Voice Master (bus version):

8-bit PCM digitizer with software defined sample rates to 25 Kbytes/sec. Recording and playback under program control. Output amplifier 1/2 watt with volume control. Frequency response 100-4500 Hz. Two mic inputs (3.5 mm monaural), one for line/headset input, the other for dynamic input. Ear output jack (3.5 mm monaural) drives headset speaker or other external 4 or 8 ohm speaker.

Voice Master System II (parallel port version):

INPUT SECTION: Input preamp has selectable gain for high and low output microphones or other audio sources. Input impedance 7500 ohms for high gain input, 1000 ohms for low gain input. Amplifier includes a AGC (automatic Gain Control) circuit which helps prevent over-saturation. The input filter to the analog to digital converter is maximally flat out to about 5000 Hz. The A/D converter is 8 bits with a programmable sample rate to 25Kbytes/sec. A second input jack at the rear of the control box is connected directly to the A/D with no amplification or filtering.

OUTPUT SECTION: Output consists of a custom 8-bit D/A converter, followed by a maximally flat filter with a cut-off frequency of about 5000 Hz. Output amplifier 1/2 watt with volume and tone controls. Output is connected to the system's speaker and a headphone jack. If a headphone is used, the speaker is disconnected. A second ouput jack at the rear of the control box is connected directly to the D/A output with no amplification or filtering.

MINIMUM SYSTEM REQUIREMENTS: 512K RAM, MSDOS 3.1 or higher

Voice Master Key **Model PCKS-PO-210** **$149.95 (5.00)**

Voice Master comes complete with circuit card, headset microphone, internal speaker bypass wire, software and manual. Software format on 5 1/4 inch format unless otherwise specified.

Voice Master System II **Model VMEX-PO-210** **$219.95 (5.00)**

Voice Master System II comes complete with controller box, 2 meter parallel port printer cable, headset microphone, 9 volt AC adapter (110 volt version only), software and manual. Software supplied in both 3 1/2 and 5 1/4 inch formats.

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The Ultra-compatible IBM® Sound and Music Card

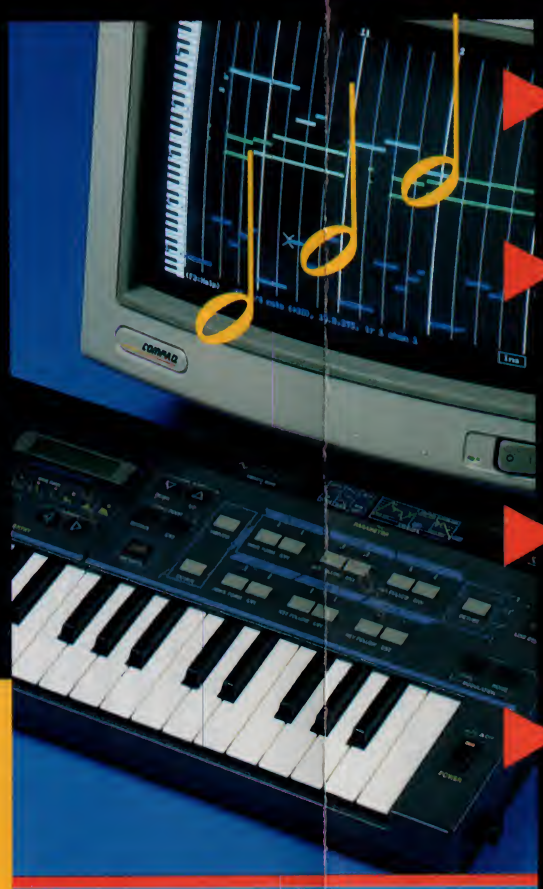
COVOX SOUND MASTER® II

ENTERTAINMENT

Supports sound from THOUSANDS of software titles.

VOICE RECOGNITION

Lets you run your computer by VOICE COMMANDS!



MUSIC

Create and perform music. Works with ALL MIDI instruments!

- Compatible with AdLib, Covox Voice Master, Speech Thing, MIDI Maestro, and many other sound cards. Even supports the internal PC sound system!
- Thousands of applications for multimedia, entertainment, business, education, music, and virtual reality.
- High Speed Digital Sampler. Direct-to-RAM or Direct-to-Disk Digital Recording & Playback Software. Turns your PC into a digital sound recorder!
- Comes complete with speakers and MIDI cables.

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